

REMARKS/ARGUMENTS

Claims 1 to 64 remain in this application. Claims 56, 57, 61 and 63 are being amended to change claim dependency and add the limitation of claim 57 into claim 56.

Claims 1 to 64 have been rejected under 35 U.S.C. 103(a) as being obvious over Hudson U.S. Patent No. 5,968,625 (Hudson) in view of Lee U.S. Patent No. 5,643,983 (Lee). The Examiner takes the position that Hudson “teaches that type of wood used for layers may vary and clearly suggest[s] the use of lower and higher grade veneer for individual layers.” The Examiner admits that Hudson “does not specifically teach the veneer grade” and looks to Lee for a “teach[ing] that it is customary in the art to subject plywood laminate to a standard ANSI/HPVAHP test (see column 2 lines 15-40).” The Examiner then takes the position that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention to chose the veneer grade according to standard test as suggested by Lee ‘983 in Hudson ‘625 since such would improve processability of the plywood laminate.”

However, present claims 1 and 48 require a veneer grade better than ANSI/HPVA veneer grade C or no greater than ANSI/HPVA veneer grade C and the cited tests of Lee are used to determine adhesive bond strength between the veneers of plywood rather than the grade of the veneers. Therefore, Lee does not teach or suggest a laminate having the specified veneer grades required by claims 1 and 48. If the Examiner disagrees, the Examiner is respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 1 and 48 must be allowed.

Further, it is not seen how choosing the veneer grades of claims 1 and 48 would improve processability of the plywood laminate. The Examiner is respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Again, without such support, claims 1 and 48 must be allowed.

Attorney for Applicants acknowledges that classifying veneer into ANSI/HPVA grades was known in the prior art. However, that fact does not teach or suggest that different grades of veneer, and particularly the grades specified in claim 1, be used in a plywood laminate. As set forth in *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600 (Fed.Cir. 1988):

“Obviousness is tested by ‘what the combined teachings of the references would have suggested to those of ordinary skill in the art.’ *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). But it ‘cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.’ *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And ‘teachings of references can be combined *only* if there is some suggestion or incentive to do so.’ *Id.* Here, the prior art contains none.

The Examiner is respectfully requested to point out where in the cited prior art there is a suggestion or incentive to combine Hudson and Lee. Absent a suggestion in Hudson or Lee of using veneer of ANSI/HPVA grade C or lower and veneer of better than ANSI/HPVA grade C in the same plywood laminate, claim 1 is allowable over the combination of Hudson and Lee.

Claim 2 requires a plywood laminate having an even number of plies. At the top of page 3 of the Office Action mailed August 24, 2005 (the latest Office Action), the

Examiner states "it would have been obvious to vary the number of plies ... since such would improve strength of the laminate." Hudson specifically states that his invention is comprised of five laminated layers or plies. See column 3, lines 66 and 67; column 7, lines 46 and 47; and column 6, lines 1 to 11. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is a teaching or suggestion of using an even number of plies of quality, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 2 must be allowed.

Further, claim 2 requires the lower grade plies to include at least one ply with grain in each direction, i.e. at least one ply that is cross-grain and at least one ply with grain parallel to the length of the ply. Hudson teaches that the intermediate plies 64 and 68, the 2nd and 4th plies having cross-ply grain, may be of inferior grade relative to the surface ply (column 4, lines 36 to 39). At column 8, lines 4 to 7, Hudson teaches that the center ply 66 and backing ply 70 (with grain parallel to the length of the plies) are made from new pine, whereas the intermediate plies 64 and 68 are made from reclaimed pine sapwood. There is no teaching in Hudson of plies with grain in different directions being of a lower grade. If the Examiner disagrees, the Examiner is respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Again, without such support, claim 2 must be allowed.

Claim 3 requires the laminate to have 6 plies. Again, Hudson teaches a laminate with 5 plies. Claim 3 also requires two adjacent plies to be of a lower grade. There is no

teaching in Hudson of adjacent plies being of a lower grade. If the Examiner disagrees, the Examiner is respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 3 must be allowed.

Claim 4 requires the second opposed ply to have a thickness less than the thickness of the other plies, claim 5 requires the second opposed ply to have a thickness approximately two-thirds of the thickness of the other plies, claim 24 requires the back ply to have a thickness less than the thickness of the other plies, and claim 25 requires the back ply to have a thickness approximately two-thirds of the thickness of the other plies. Near the middle of page 3 of the latest Office Action, the Examiner states that "it would have been obvious to optimize thickness ... of the individual layers since such is known to improve mechanical properties of the laminate." Attorney for Applicants respectfully requests that the Examiner explain how making the second opposed ply thinner than the other plies improves mechanical properties of the laminate. Otherwise there is no motivation to make such a modification, as required by In re Fine, supra, and the rejection of claims 4 and 5 is improper.

Claims 6 and 7 require the first opposed ply, which is a higher grade ply, to have a quality less than the quality of the other higher grade plies, i.e. there are three different quality of plies. In similar manner claim 26 requires crossband ply adjacent the decorative ply, which is a higher grade ply, to have a quality less than the quality of the other higher grade plies. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion or using three

different qualities of plies, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 6 and 7 must be allowed.

Claims 8 and 27, and claims 9 and 28 require the plies to be hardwoods, and meranti or lauan, respectively. The Examiner has not pointed to a teaching or suggestion in the prior art of such features in combination with the specified grades of veneer. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 8, 9, 27 and 28 must be allowed.

Claims 12, 13, 31 and 32 require a moisture barrier applied to the exposed surfaces of the laminate. The Examiner has not pointed to a teaching or suggestion in the prior art of such a feature, particularly in combination with the specified grades of veneer. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 12, 13, 31 and 32 must be allowed.

Claims 14 and 33 require the plies to have a grain direction of 1/48 or less. The Examiner has not pointed to a teaching or suggestion in the prior art of such features, particularly in combination with the specified grades of veneer. Attorney for Applicants

respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 14 and 33 must be allowed.

Claim 17 requires the total number of plies in the plywood laminate to be 4, 6 or 8. Claim 17 is allowable for the same reasons as claims 2 and 3.

Claim 21 requires the crossband plies to include a higher grade ply and a lower grade ply. The Examiner has not pointed to a teaching or suggestion in the prior art of such a feature, particularly in combination with the specified grades of veneer. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 21 must be allowed.

The Examiner has not pointed to any prior art which shows a decorative plywood laminate has different grades of veneer plies with the crossband ply adjacent the decorative ply being a higher grade ply. Absent such a suggestion, claim 22 is allowable.

Likewise with respect to claim 23, the Examiner has not identified any prior art that shows the specifically claimed structure. Therefore, claim 23 is allowable.

At the bottom of page 3 of the latest Office Action, the Examiner takes the position that regarding "claims related to tongue and groove and click-lock connections the examiner submits that such connections are so well established in the art that it would have been obvious to one having ordinary skill in the art to incorporate such connections into any design for laminated veneer." However, claims 41, 52 and 60 require the

thickness of the click-lock tongue to be greater than the thickness of each of the plies of the substrate and claims 44, 56 and 57 require the click-lock tongue to include an adhesive layer. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there are such teachings or suggestions, or if the rejections are based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 40, 44, 52, 56 and 57 must be allowed.

Claims 46 and 59 require the decorative ply to comprise a polymer resin-impregnated layer and a printed pattern applied to the resin-impregnated layer. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is a teaching or suggestion of a decorative ply comprising a polymer resin-impregnated layer and a printed pattern applied to the resin-impregnated layer in combination with the specified grades of veneer, or if the rejections are based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claims 46 and 59 must be allowed.

Claim 47 requires one exposed ply to be of higher quality, the adjacent ply to be of lower quality and the next adjacent ply to be of lower quality. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there are such teachings or suggestions, or if the rejections are based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 47 must be allowed.

Claim 49 requires three types of plies, a higher quality hardwood, a lower quality hardwood and a lower quality softwood. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 49 must be allowed.

Claim 62 requires the projection of the click-lock connection to comprise at least three plies. Attorney for Applicants respectfully requests the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Without such support, claim 62 must be allowed.

Attorney for Applicants submits that all the claims are in a condition for allowance. Therefore, early consideration and allowance are respectfully requested.

Respectfully submitted,

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Date

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